

AMENDMENT TO THE DRAWING

Attached are a replacement sheet and an annotated sheet showing changes to FIG. 1. The replacement sheet replaces the original sheet including FIG. 1. In amended FIG. 1, reference number 150 has been added.

REMARKS

Claims 1, 3-10, and 17-79 are pending. Claims 1, 32, 51-52, and 63-64 are amended. Claims 2 and 11-16 were cancelled without prejudice or disclaimer, and claims 80-83 were withdrawn from consideration. The remaining claims are unchanged.

No new matter has been added by the amendments above. Applicant respectfully requests reconsideration based on the foregoing amendments and these remarks.

Drawing Objection

FIG. 1 was objected to based on the omission of reference number 150 with respect to the message interchange network. In the attached replacement sheet, reference number 150 has been added.

Claim Rejections: 35 U.S.C. § 112

Applicant's attorney apologizes for the omission of amending claim 1 as indicated in the remarks section of Amendment C. By this Amendment, claim 1 has been amended to recite "receiving an application-level message."

Claims 1 and 51 were rejected under 35 U.S.C. § 112, second paragraph, as having insufficient antecedent basis for the feature of "determining a route path for delivery of said messages to one or more recipient services." Claims 1 and 51 have been amended to recite, "determining a route path for delivery of said application-level message to said one or more recipient services," to more clearly define the subject matter of those claims.

Claims 1, 32, 51, 52, 63, and 64 were rejected under 35 U.S.C. § 112, first paragraph, as not being enabled by the specification. Applicant respectfully disagrees. Persons skilled in the art would understand the term, "application-level message," from the title of the present application and earlier-filed provisional application, "System and Method for Routing Messages Between Applications." Also, the skilled artisan would understand the meaning of the term from paragraph 1023 of the application as filed (page 6), for example, "... services registered with message interchange network 150 represent applications that send or receive messages." Additional support is provided in paragraphs 1061-1064 (pages 16-17). Applicant's attorney would be glad to discuss the cited passages with the Examiner if necessary for withdrawal of the rejection.

Claims 1 and 51 were rejected under 35 U.S.C. § 112, first paragraph, as not being enabled by the specification. Claims 1 and 51 have been amended to change “features required by” to “format for,” to more clearly define the subject matter of those claims.

Claims 52, 63, and 64 were rejected under 35 U.S.C. § 112, first paragraph, as not being enabled by the specification, with respect to the phrase, “according to properties and permissions associated with said service.” Applicant respectfully disagrees. For example, as explained in paragraph 1023 (page 6) of the application as filed, “[f]or each service registered by an organization with message interchange network 150, there are a number of properties and permissions that can be associated with the service. Examples include a unique service identifier, authentication information, mode of message delivery, windows of time during which messages are accepted, URL address of service, permission to invoke other services to act on a message, and rules that modify the invocation of services. These properties and permissions affect the routing of messages from or to the service.” Applicant’s attorney would be glad to discuss the cited passages with the Examiner if necessary for withdrawal of the rejection.

Claim Rejections: 35 U.S.C. § 102

Claims 1, 4, 6-8, 10, 17-30, 32-74, and 76-79 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Publication No. US 2004/0078373, Ghoneimy et al. (hereinafter Ghoneimy). Applicant respectfully traverses the rejection for the following reasons.

Claim 1 defines a method occurring across a message interchange network that is built on an open platform overlaying a public network, wherein different services may be managed by different organizational entities. The method of claim 1 provides for routing an application-level message from a sending service to a recipient service through one or more in-transit services. In one implementation, the in-transit service may perform a range of operations on the message as it travels from the sending service to the recipient service. The operations performed by the in-transit service alter the content of the message, such that the message has the proper format for the message to be accepted by the recipient service, thereby enabling the recipient service to do further processing on the message.

Claim 1 recites at least one feature, which Ghoneimy fails to disclose or suggest:

(b) determining a route path for delivery of said application-level message to said one or more recipient services, said route path including one or more in-transit services, wherein said determining being based on one or more of: a reference to a service identified in said header element, a routing script defined by a sending service, a routing script defined by a recipient service, and a routing script defined by an in-transit service. (Emphasis Added).

Ghoneimy only describes a system and method for automating work processes, that “ensures that business processes follows predetermined rules” and that “each task in the process is regulated such that the appropriate people have access to the appropriate data and are instructed to perform the task at the appropriate time” (Abstract). That is, Ghoneimy requires that predetermined rules be set up and followed by all the participants in the system.

In the method of claim 1, on the other hand, regardless of any predetermined rules, the route path of the application-level message is determined based on one or more services, which send the message, receive the message, and/or operate on the message in transit. In other words, the various services that participate in the routing, that is, the sending service, the recipient service, and/or an in-transit service, can determine or alter a route path for an application-level message. Ghoneimy only teaches routing messages according to predetermined rules, and does not offer any disclosure or suggestion of even the possibility of determining a route path based on one or more of such services, as recited in claim 1.

Furthermore, Ghoneimy specifies that the workflow system is intended to be deployed within a single enterprise. For example, paragraph [0028] explains that “the workflow system provides a uniform and scalable support infrastructure within the enterprise through a web-based interface,” and “[s]ome key features of the workflow system include: Enterprise-wide, scalable infrastructure for handling processes of all types...” and so on. Paragraph [0033] states, “[t]he main component of the workflow system is the workflow engine.” This workflow engine is further discussed in the following paragraph and said to support “...over 100 real-time (tethered) users and up to 1000 ‘casual’ (non-tethered) users via the Web, simultaneously, all from a single system” (paragraph [0034]).

Claim 1, on the other hand, recites that “at least some of the one or more sending services and the one or more recipient services are managed by different organizational entities.” Thus, whereas Ghoneimy presents a system and method for a single enterprise, the method of claim 1 supports interactions between multiple organizational entities. This is one of the reasons for the Applicant’s system and method being so advantageous for small and medium sized enterprises, in particular, which may not be able to afford the big infrastructure of a company that employs the single-system techniques of Ghoneimy.

For at least these reasons, it is respectfully submitted that claim 1 is neither anticipated nor rendered obvious by Ghoneimy, and that the rejection of claim 1 under 35 U.S.C. § 102(e) should be withdrawn.

Claims 32, 51, 52, 63, and 64, rejected on the same grounds as claim 1, incorporate similar features as claim 1. Therefore, the rejections of these claims should be withdrawn for similar reasons as above.

The rejections of the dependent claims are also respectfully traversed. The various dependent claims incorporate all of the features of the independent claims on which they are based and, therefore, are neither anticipated nor rendered obvious for at least the reasons discussed above.

Claim Rejections: 35 U.S.C. § 103

Claims 3, 5, 9, and 75 were rejected under 35 U.S.C. § 103(a) as obvious in view of Ghoneimy. The Applicants respectfully traverse the rejection for the following reasons.

With respect to claims 3 and 5, the Examiner stated that, “although Ghoneimy doesn’t specifically disclose the type of language used to implement the messaging system, such limitations are merely a matter of design choice and would have been obvious in system of Ghoneimy.” (Office Action, page 9). Regardless of whether this reasoning is proper, it is inconsequential, since it does not cure any of the deficiencies discussed above with respect to claim 1, from which claims 3 and 5 depend.

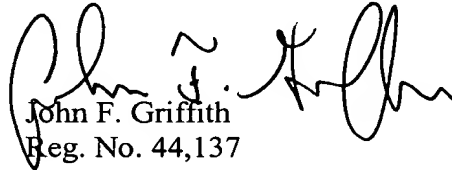
With respect to claims 9 and 75, regardless of whether it was or was not obvious to use the simple object access protocol, this does not cure the deficiencies discussed above with respect to claim 1 and 64, from which claims 9 and 75, respectively, depend.

For at least these reasons, it is respectfully submitted that the rejections of dependent claims 3, 5, 9, and 75 under 35 U.S.C. § 103(a) should be withdrawn.

Conclusion

The Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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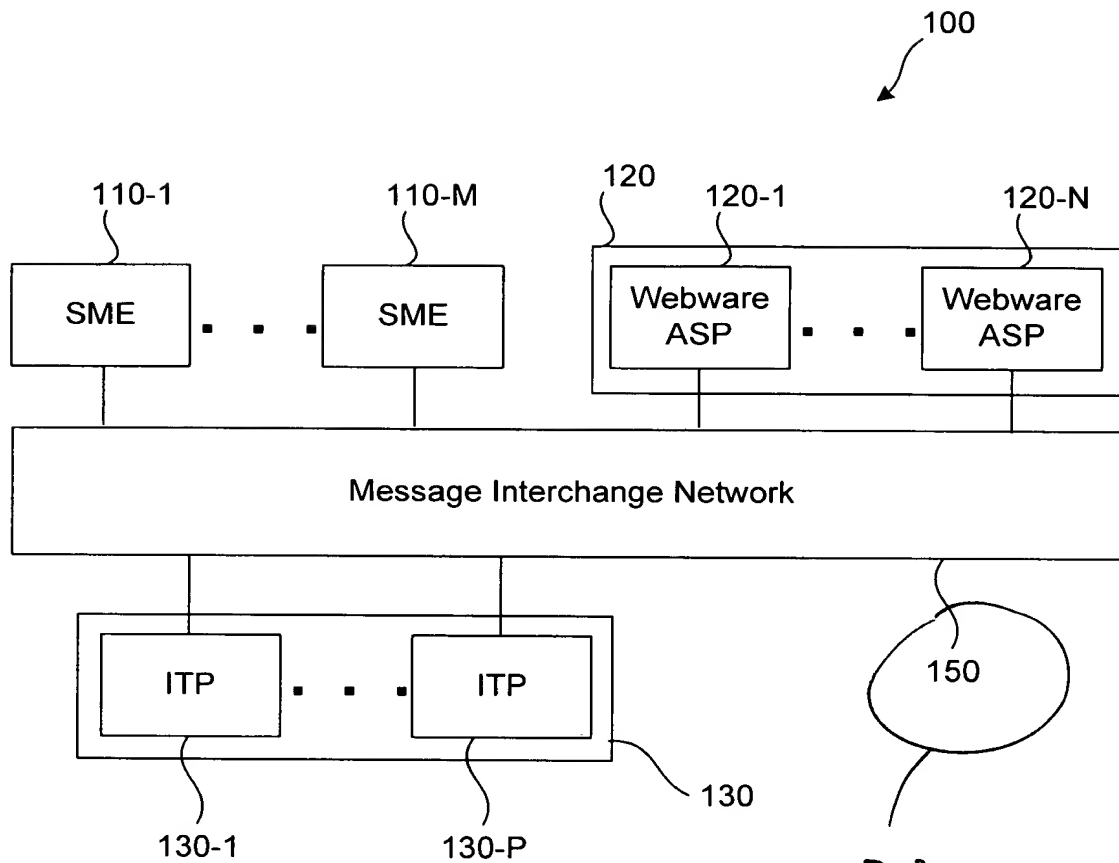


FIG. 1

Reference
Number 150
Added